RE: Interim decontamination proposal

FEB - 1 2000

Ms. Patricia Kablach Casano
Counsel, Environmental Legislative and
Regulatory Affairs
Corporate Environmental Program
General Electric Company
1299 Pennsylvania Avenue, N.W. Suite 1100 West
Washington, DC 20004-2407

Dear Ms. Casano:

This letter responds to your request, dated December 16, 1999, that EPA approve an interim proposal under 40 C.F.R. 761.79(h) to decontaminate painted metal surfaces on machinery pending completion of the data collection effort you are undertaking to support your final § 761.79(h) alternate decontamination proposal. As we understand your interim proposal, GE would like to consider machinery clean (or decontaminated) under two circumstances. First, GE would like to consider machinery clean if pre-cleaning wipe samples of the machinery showed less than 10 micrograms per 100 square centimeters (10  $\mu$ g/100 cm²) PCBs. Alternatively, when pre-cleaning wipe samples show greater than 10  $\mu$ g/100 cm² PCBs, GE would like to consider machinery clean if a chip sample of paint from the machinery contained less than 50 parts per million (ppm) PCBs. For the following reasons, EPA cannot approve your request.

As we have discussed, EPA has two concerns about decontaminating porous surfaces such as painted metal on machinery. First, EPA is concerned that PCBs from spills can penetrate beneath the surface of the paint such that the PCBs cannot be removed by surface cleaning or be detected by wipe samples. Indeed, EPA has evidence that such penetration occurs. For example, EPA's Region 5 has conducted chip sampling on painted metal surfaces with surface concentrations near  $10 \,\mu\text{g}/100 \,\text{cm}^2$  ( $11 \,\mu\text{g}/100 \,\text{cm}^2$  and  $12 \,\mu\text{g}/100 \,\text{cm}^2$ ). The paint chip samples from these surfaces, however, contained between 61 ppm and 171 ppm PCBs. Second, EPA is concerned that PCBs, which have penetrated below the surface of paint, will reemerge to the surface and become available for dermal or inhalation exposure. Because your proposal does not account for PCBs that may be beneath the surface of paint on machinery that tests equal to or below  $10 \,\mu\text{g}/100 \,\text{cm}^2$  using a wipe sample, it addresses neither of these concerns. Consequently,

- EDA	is not able t	o make a $TC$	$C\Delta$ no unio	consiste sicle	dindino and	 <del>, not able to t</del>	<i>#</i>
symbolfavo	rably tapout y	our reduct.	01 1 110 4111 00	BOILGOTO TABLE	iniding, and	 1101 4010 10 1	
SURNAME	5mith	McGurk					
DATE	2/1/00	zlipo					

However, for an interim period, EPA would consider a proposal in which GE agreed to clean the painted surface to a level  $\leq 10~\mu g/100~cm^2$  and chip sample the paint. If the chip sample contained < 50~ppm PCBs, the painted surface would be considered unregulated for disposal; if the chip sample contained < 2~ppm PCBs, the painted surface could be distributed in commerce for reuse. If this proposal is acceptable, please indicate that in a letter to me, and we will prepare a response in the form of a limited duration approval under 40 CFR 761.79(h).

As you know, parts of this proposed approval rely on risk assessments using a toxicity value for PCBs as finalized in the PCB disposal amendments published on June 29, 1998. If EPA changes the value used for the toxicity of PCBs used in the 1998 rulemaking, EPA may recall any approvals issued based on that toxicity value. If you have any questions about this letter, please contact Dr. John H. Smith at 202-260-3964.

Sincerely,

Tony Baney, Chief

Fibers and Organics Branch (7404)

Patricia Kablach Casano Counsel, Environmental Legislative and Regula Corporate Environmental Programs

General Electric Company 1299 Pennsylvania Ave., N.W., Suite 1100 West Washington, DC 20004-2407 Phone: 202/637-4228 Fax: 202/637-4017

# **FAX TRANSMITTAL**

To:

John Smith

9/260-1724

cc: Chris Bell, Esq.

Sara McGurk

9/2/60-1724 (please copy) 9/564-5644

David Hird, Esq.
Angus Macbeth

Robert Wing, Esq. Sylvia Quast, Esq.

9/514-8865

December 17, 1999

Pages: 5 (including cover)

RE: PCB research protocol

Please see attached letter.

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to communication is strictly prohibited. If you have received this communication in error at



Patricia Kablach Casano Counsel, Environmental Legislative and Regulatory Affairs Corporate Environmental Programs

General Electric Company
1299 Pennsylvania Ave., N.W., Suite 1100 West
Washington, DC 20004-2407
Phone: 202/637-4228
Fax: 202/637-4017

December 16, 1999

### **VIA FACSIMILE**

Mr. John H. Smith (MC-7404)
U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
401 M Street, S.W.
Rm. E835F
Washington, D.C. 20460
FAX 9/260-1724

Re: Nondestructive Decontamination of Painted Metal Surfaces

#### Dear John:

I am writing to confirm our discussion on Wednesday, December 8, 1999 regarding GE's research protocol, "Nondestructive Decontamination of PCB-Contaminated Painted Surfaces ("Protocol")." During that discussion, we resolved the questions raised in the document entitled, "EPA Comments – December 7, 1999" as follows: [Headings used below are from the December 7<sup>th</sup> comments.]

## 1. Proposed Work Plan - Sample Preparation.

- EPA asked GE to justify its decision to limit its samples to epoxy and enamel paints. Frank Mondello explained that the decision to limit the samples to epoxy and enamel paints was based on discussions with painters who have been employed by GE for 20 or more years. All of the painters stated that epoxy and enamel paints were used almost exclusively on industrial
- EPA asked GE to demonstrate that there has not been any significant change in the composition of epoxy and enamel paints during the past 25 years that would affect the extent to which such paints absorb PCBs. GE will contact the National Paint and Coatings Association to determine whether that information is available, and, if so, whether there have been any changes in such paints that would affect absorption of PCBs. If the information is available, and shows that there have been no changes of concern in epoxy and enamel paints during the past 25 years, GE will ask the Association (or the appropriate person) to issue a letter to that effect.

December 17, 1999 Page 2

### 2. Sample Spiking Procedure.

• EPA expressed concern that the sample spiking procedure, which involves using a glass rod to spread the PCB-containing solution over the surface of the sample plate, was not sufficient to ensure that the entire surface of the sample plate would be covered by the solution. Frank explained that he had chosen that method in lieu of dipping the plate into the solution, and then letting the solution drain from the plate, (1) so that he could quantify the amount of PCBs applied to the surface; (2) to minimize the amount of PCBs that would need to be used and the waste generated by the procedure; and (3) to maximize the amount of PCBs in contact with the surface so as to maximize the potential for absorption. EPA agreed that GE could continue to use this procedure, so long as the surface of each sample plate is completely coated. To provide further assurance on this issue, GE will increase the amount of PCB-containing solution applied to each sample plate from 70 microliters to a minimum of 100 microliters.

# 3. Surface Decontamination and Testing of PCB-Spiked Surfaces.

- EPA stated that using the average PCB level to determine whether the decontamination process was successful would not be appropriate for painted surfaces, because the primary exposure route would be dermal contact with an individual item in a specific location. GE explained that it had relied on 40 C.F.R. § 761.395(c)(2), which governs validation studies for new performance-based decontamination solvents, and provides that "measurements from the contaminated surfaces must have an arithmetic mean of ≤ 10 ug/100 cm²." EPA then agreed that use of the average PCB level is appropriate.
- EPA noted that the "Additional Recommendations" set forth in Appendix I to GE's Protocol should be made a mandatory part of the "Wipe Sampling Procedure." GE agreed to make that change.
- EPA asked GE to clarify that, in the context of Appendix 1, the gauze pad is applied to the surface of the sample plate with a gloved hand. GE confirmed that a gloved hand is used.
- EPA asked GE to modify Appendix 2b to the Protocol to identify the cleaner(s) being used by active ingredients, as opposed to trade names, to protect against the possibility that specified products would be removed from the market. GE agreed to make this change.

December 17, 1999 Page 3

> EPA asked GE to modify Step 3 in Appendix 2b to provide that a specified surface area must be scrubbed for one minute, and to clarify what is meant by "scrub". GE agreed to make these changes.

After we finished discussing the Protocol, we briefly discussed GE's petition for approval of an alternative decontamination method for painted metal surfaces manufactured after 1984. You asked whether, if EPA approved the petition, GE would take samples after decontaminating equipment to confirm that the level of PCBs is  $\leq$  10 ug/100 cm², and we stated that that is our intent. You then stated that so long as GE takes confirmatory samples, the decontamination process could be repeated as many times as necessary to reduce the level of contamination to  $\leq$  10 ug/100 cm². You also indicated that with the increase in the level of PCBs in the spiking solution used for the Protocol to 300,000 ppm, GE had addressed EPA's concern that the Protocol did not represent adequately all spills that could have

You indicated that, assuming that GE makes the changes discussed above in items 1 through 3, and obtains confirmation that no relevant, significant changes have been made in the composition of epoxy and enamel paints during the past 25 years, the only obstacle remaining to approval of the petition would be the lack of data adequate to demonstrate that PCBs that have spilled onto, and been absorbed by, paint will not migrate from the paint. You further indicated that if the data currently being collected by GE demonstrates that PCBs are not being absorbed into the paint PCBs are being absorbed into the paint PCBs are being absorbed into the paint PCBs are being absorbed into the paint after 180 days, then EPA would request

X I asked whether, pending the completion of the data collection effort, EPA would be willing to approve the petition if we modified it to require a chip sample whenever pre-cleaning wipe samples showed > 10 ug/100 cm² PCBs, and provided that the equipment would be deemed to be decontaminated only if the chip sample contained < 50 ppm PCBs. You agreed to think about that

I believe that the foregoing accurately reflects our discussion. Please let me know if you have a different recollection.

Sincerely,

Patricia Kablach Casano

December 17, 1999 Page 4

Cc: Robert Wing, Esq.
Sara McGurk
Sylvia Quast, Esq.
Angus Macbeth, Esq.
Chris Bell, Esq.

All via facsimile



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

FEB - 1 2000

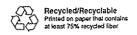
OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Patricia Kablach Casano
Counsel, Environmental Legislative and
Regulatory Affairs
Corporate Environmental Program
General Electric Company
1299 Pennsylvania Avenue, N.W. Suite 1100 West
Washington, DC 20004-2407

Dear Ms. Casano:

This letter responds to your request, dated December 16, 1999, that EPA approve an interim proposal under 40 C.F.R. 761.79(h) to decontaminate painted metal surfaces on machinery pending completion of the data collection effort you are undertaking to support your final § 761.79(h) alternate decontamination proposal. As we understand your interim proposal, GE would like to consider machinery clean (or decontaminated) under two circumstances. First, GE would like to consider machinery clean if pre-cleaning wipe samples of the machinery showed less than 10 micrograms per 100 square centimeters (10  $\mu$ g/100 cm²) PCBs. Alternatively, when pre-cleaning wipe samples show greater than 10  $\mu$ g/100 cm² PCBs, GE would like to consider machinery clean if a chip sample of paint from the machinery contained less than 50 parts per million (ppm) PCBs. For the following reasons, EPA cannot approve your request.

As we have discussed, EPA has two concerns about decontaminating porous surfaces such as painted metal on machinery. First, EPA is concerned that PCBs from spills can penetrate beneath the surface of the paint such that the PCBs cannot be removed by surface cleaning or be detected by wipe samples. Indeed, EPA has evidence that such penetration occurs. For example, EPA's Region 5 has conducted chip sampling on painted metal surfaces with surface concentrations near  $10~\mu g/100~cm^2$  ( $11~\mu g/100~cm^2$  and  $12~\mu g/100~cm^2$ ). The paint chip samples from these surfaces, however, contained between 61 ppm and 171 ppm PCBs. Second, EPA is concerned that PCBs, which have penetrated below the surface of paint, will reemerge to the surface and become available for dermal or inhalation exposure. Because your proposal does not account for PCBs that may be beneath the surface of paint on machinery that tests equal to or below  $10~\mu g/100~cm^2$  using a wipe sample, it addresses neither of these concerns. Consequently, EPA is not able to make a TSCA no unreasonable risk finding, and therefore, is not able to act favorably upon your request.



However, for an interim period, EPA would consider a proposal in which GE agreed to clean the painted surface to a level  $\leq 10~\mu g/100~cm^2$  and chip sample the paint. If the chip sample contained  $\leq 50~ppm$  PCBs, the painted surface would be considered unregulated for disposal; if the chip sample contained  $\leq 2~ppm$  PCBs, the painted surface could be distributed in commerce for reuse. If this proposal is acceptable, please indicate that in a letter to me, and we will prepare a response in the form of a limited duration approval under 40 CFR 761.79(h).

As you know, parts of this proposed approval rely on risk assessments using a toxicity value for PCBs as finalized in the PCB disposal amendments published on June 29, 1998. If EPA changes the value used for the toxicity of PCBs used in the 1998 rulemaking, EPA may recall any approvals issued based on that toxicity value. If you have any questions about this letter, please contact Dr. John H. Smith at 202-260-3964.

Sincerely,

Tony Baney, Chief

Fibers and Organics Branch (7404)